



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re United States Patent Application of: Dock

Docket No.:

4241-685

**Applicants:** 

XU, Xueping, et al.

Conf. No.:

1430

**Application No.:** 

10/712,351

Art Unit:

1775

Date Filed:

November 13, 2003

Examiner:

Timothy M. Speer

Title:

LARGE AREA, UNIFORMLY

LOW DISLOCATION

**DENSITY GAN SUBSTRATE** 

AND PROCESS FOR MAKING THE SAME

**Customer No.:** 

23448

## FIRST CLASS MAIL CERTIFICATE

I hereby certify that I am mailing the attached documents to the Commissioner for Patents on the date specified, in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313, First Class Mailed under

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Kate Pope

March 12, 2007

Date of Mailing

## THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN U.S. PATENT APPLICATION NO. 10/712,351

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO/SB/08A. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee.

- a. I hereby certify that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement (37 C.F.R. §1.97(e)(1)) with the exception of U.S. Patent Application 2004-0251471, which is now being cited as an English language counterpart to the Japanese language reference WO 03/043150, for the convenience of the Examiner.
- b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2).

Respectfully submitted,

Vincent K. Gustafson

Reg. No. 46,182

Attorney for Applicants

INTELLECTUAL PROPERTY/ TECHNOLOGY LAW Phone: (919) 419-9350 Fax: (919) 419-9354 Attorney File No.: 4241-685

Enclosures: IDS Forms [ 2 pg(s).] Foreign Patent References [ 173 pgs.] Non-Patent References [ 26 pgs.]

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PTO/SB/08a (09-06)

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THIRD SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Art Unit 1775 **Examiner Name** Timothy M. Speer

(Use as many sheets as necessary) 4241-685 Attorney Docket Number Sheet 1

			U.S. PATENT	DOCUMENTS		
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
nitials* No.1	No.1	Number - Kind Code <sup>2 (if known)</sup>	MM-DD-YYYY	Applicant of Cited Document	Figures Appear	
		US- 2004/0251471 - A1	12-16-2004	Dwilinski, Robert, et al.		
		US- 6,447,604 - B1	09-10-2002	Flynn, Jeffrey et al.		
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FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵	
Initials*	No.'	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)		Applicant of Cited Document			
		WO - 03/043150 - A1	05-22-2003	Dwilinsky, Robert, et al.			
		WO - 02/01608 - A2	01-03-2002	Flynn, Jeffrey S., et al.			
		EP - 1 249 522 - A2	10-16-2002	Motoki, Kensaku, et al.			
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Substitute for form 1449B/PTO				Complete if Known		
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INFORMATION DISCLOSURE				First Named Inventor	Xu et al.	
				Art Unit	1775	
STA	ATEMENT BY AP	PLIC	CANT	Examiner Name	Timothy M. Speer	
(Use as many sheets as necessary)						
Sheet	2	of	2	Attorney Docket Number	4241-685	

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		HIRAMATSU, KAZUMASA, ET AL., Fabrication and characterization of low defect density GaN using facet-controlled epitaxial lateral overgrowth (FACELO), J. Crys. Growth, December 2000, Page(s) 316-326, Volume 221, Number 1-4				
***************************************	-	MOTOKI, KENSAKU, ET AL., Preparation of large GaN substrates , Mater. Sci. Eng. B, May 30, 2002, Page(s) 123-130, Volume 93, Number 1-3				
		VENNEGUES, P., ET AL., Reduction mechanisms for defect densities in GaN using one- or two-step epitaxial lateral overgrowth methods, J. Appl. Phys., May 1, 2000, Page(s) 4175-4181, Volume 87, Number 9				
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether of not citation is in conformance with MPEP 609. Draw line unough citation in the micromanical and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.